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| EXAMINER |
|---|
| O CONNOR, BRIAN T |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *27 October 2008*.

2a)☒ This action is **FINAL**.          2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1,3,6,7,9,13,15,18 and 20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,6,7,9,13,15,18 and 20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

## DETAILED ACTION

### *Response to Amendment*

1.      This office action is in response to applicant's amendment filed on 10/27/2008.

2.      Claims 1, 3, 6, 7, 9, 12, 13, 15, 18, and 20 are currently pending.


### *Response to Arguments*

3.      The Affidavit under 37 CFR 1.132 filed on 10/27/2008 is insufficient to overcome

the rejection of claims 1, 3, 6, 7, 9, 12, 13, 15, 18, and 20 based upon AAPA in view of

Schulzrinne as set forth in the last Office action because: the submitted declaration

does not demonstrate that the Applicant's claimed invention is non-obvious before the

references used under 103(a) rejection. Appendices A, B, and C do not show the

claimed invention and do not provide evidence of the Applicant's claims being non-

obvious, thus are not related to the current rejection. The Examiner agrees the

Appendices A, B, and C demonstrate an expert's second opinion of the state of the art

and they demonstrate an improvement of the prior art, while they do not appear to show

that the art at the time of the invention was non-obvious or the technique suggested in

the prior art would not have resulted in a successfully operating modem connection.


### *Claim Rejections - 35 USC § 103*

4.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

5.      Claims 1, 3, 6, 7, 9, 12, 13, 15, 18, and 20 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Schulzrinne

et al. ("RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals",

Internet-Draft, November 28, 1999, IETF; hereafter Schulzrinne).

**With respect to claims 1 and 7**, AAPA discloses a communication technique

using a first gateway (120 of Figure 1), a first modem (110 of Figure 1), a telephone line

between the first gateway and the first modem (114, 112 of Figure 1), a second gateway

(140 of Figure 1), a second modem (150 of Figure 1), a telephone line between the

second gateway and the second modem (142, 144 of Figure 1) and a packet network

for communication between the first gateway and the second gateway (130 of Figure 1).

AAPA explains when the second modem receives a call setup request from the first

modem (page 3, lines 9-14) the second modem sends an answer tone to the second

gateway (page 3, lines 18-20).  The answer tone is received, detected, and processed

by the first gateway (pg 4, lines 8-9).  The first gateway also detects a phase reversal in

the answer tone (pg 4, lines 21-22) so that its echo canceller is disabled.

However, AAPA fails to disclose transmitting a first message to indicate an

answer tone to the second gateway over the packet network and sending a second

message indicating a phase reversal to the second gateway over the packet network.

Schulzrinne discloses a method for telephone gateways connected to packet

networks where the gateway sends an encoded audio event packet (pg 3, section 3.2;

event packet is a message) for fax-related tones (pg 8, section 3.11) including an ANS

(answer tone) and /ANS (answer tone with phase reversals) encoded with decimal

values of 32 and 33 (pg 10, table 3). The audio event packet is sent by a gateway to

another gateway or receiver (pg 2, Section 2, last partial paragraph) as soon as the

audio event is recognized or detected (pg 5, section 3.6, first sentence).

Schulzrinne realizes the benefit of improved tone response by using event

packets instead of low-rate voice codes which cannot guarantee the quality of tone

signals (pg 1, section 1, first and second paragraphs).  Thus, it would have been

obvious to one of ordinary skill in the art at the time of the invention to use the event

packets of Schulzrinne to send messages for the answer tone and phase-reversed

answer tone detection events in AAPA.

**With respect to claims 13 and 18**, AAPA discloses a communication technique

using a first gateway (120 of Figure 1), a first modem (110 of Figure 1), a telephone line

between the first gateway and the first modem (114, 112 of Figure 1), a second gateway

(140 of Figure 1), a second modem (150 of Figure 1), a telephone line between the

second gateway and the second modem (142, 144 of Figure 1) and a packet network

for communication between the first gateway and the second gateway (130 of Figure 1).

AAPA explains when the first gateway receives a call setup request from the first

modem (page 3, lines 9-14) the first gateway calls the second gateway (page 3, line

10).  An answer tone, sent by the second modem, is received, detected, and processed

by the first gateway (pg 4, lines 8-9).  The first gateway also detects a phase reversal in

the answer tone (pg 4, lines 21-22) so that its echo canceller is disabled.

However, AAPA fails to disclose transmitting a first message to indicate an answer tone to the second gateway over the packet network, sending a second message indicating a phase reversal to the second gateway over the packet network, and disabling an echo canceller in response to the second message indicating a phase reversal.

Schulzrinne discloses a method for telephone gateways connected to packet networks where the gateway sends an encoded audio event packet (pg 3, section 3.2; event packet is a message) for fax-related tones (pg 8, section 3.11) including an ANS (answer tone) and /ANS (answer tone with phase reversals) encoded with decimal values of 32 and 33 (pg 10, table 3). The audio event packet is sent by a gateway to another gateway or receiver (pg 2, Section 2, last partial paragraph) as soon as the audio event is recognized or detected (pg 5, section 3.6, first sentence). The /ANS event packet will disable echo cancellers (pg 8, section 3.11, **/ANS**).

Schulzrinne realizes the benefit of improved tone response by using event packets instead of low-rate voice codes which cannot guarantee the quality of tone signals (pg 1, section 1, first and second paragraphs). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the event packets of Schulzrinne to send messages for the answer tone and phase-reversed answer tone detection events in AAPA.

**With respect to claims 3, 9, 15, and 20**, AAPA does not disclose a packet message that indicates an amplitude-modulated answer tone with phase reversal.

Schulzrinne discloses an encoding symbol for an amplitude-modulated answer tone with phase reversal (pg 8, Section 3.11 Data Modem and Fax Events; see **/ANSam**).

Schulzrinne realizes the benefit of improved tone response by using event packets instead of low-rate voice codes which cannot guarantee the quality of tone signals (pg 1, section 1, first and second paragraphs). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the event packets of Schulzrinne to send messages for the answer tone and phase-reversed answer tone detection events in AAPA.

**With respect to claims 6 and 12**, AAPA further discloses that the second gateway also has an echo canceller that is disabled when an answer tone is detected (pg 4, lines 21-22).

AAPA does not disclose receiving a packet message that indicates an answer tone with a phase reversal from the first gateway.

Schulzrinne discloses an encoding symbol for an answer tone with phase reversal (pg 8, Section 3.11 Data Modem and Fax Events; see **/ANS**).

Schulzrinne realizes the benefit of improved tone response by using event packets instead of low-rate voice codes which cannot guarantee the quality of tone signals (pg 1, section 1, first and second paragraphs). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the event packets of Schulzrinne to send messages for the answer tone and phase-reversed answer tone detection events in AAPA.

## *Response to Arguments*

6.     Applicant's arguments filed on 10/27/2008 have been fully considered but they
are not persuasive.

     **(A)** Applicant argues with respect to claims 1 and 7, see page 8 (third full
paragraph), that "because the phase reversal appears every 40ms, 'the audio event' for
either ANS or /ANS is not recognized or detected in Schulzrinne until over 450ms into
the answer tone detection. Applicant respectfully submits that there is no disclosure,
teaching or suggestion in Schulzrinne that an audio event distinguishing ANS and /ANS
(or ANSam or /ANSam) occurs prior to 450ms after the start of the answer tone."

     The Examiner maintains the 103(a) rejection over AAPA in view of Schulzrinne
because Schulzrinne teaches that as soon as an audio event is detected then the audio
event is sent by one gateway to another gateway. When the answer tone is recognized
then a message to indicate answer tone recognition is sent; and when answer tone with
phase reversal is recognized then a message to indicated answer tone with phase
reversal is sent. A feature for distinguishing the ANS audio event from the /ANS audio
event is not found in the pending claims 1 and 7.

     **(B)** Applicant argues with respect to claims 1 and 7, see pages 8 to 9
(paragraphs starting at end of page 8 and ending at top of page 9) that "Applicant
respectfully submits that there is no disclosure, teaching, or suggestion in Schulzrinne
that when a first gateway mode detects an answer tone, the first gateway modem
transmits an ANS message to a second gateway modem, and that when the first

gateway modem later detects a phase reversal in the answer tone, the first gateway modem transmits an /ANS message to the second gateway modem following the transmission of the ANS message."

The Examiner maintains the 103(a) rejection over AAPA in view of Schulzrinne because Schulzrinne teaches sending a message for an audio event when the audio event is detected (pg 5, section 3.6, first sentence).

**(C)** Applicant argues with respect to claims 1 and 7, see page 9 (first full paragraph) that "the AAPA and Schulzrinne, individually or in combination, fail to disclose, teach or suggest anything more that the conventional art, and that more than a single message is transmitted for detecting an answer tone with phase reversal".

The Examiner maintains the 103(a) rejection over AAPA in view of Schulzrinne and view the combined teachings as sending one message for detecting an answer tone and sending one message for detecting an answer tone with phase reversal as recited in the pending claims 1 and 7.

**(D)** Applicant argues with respect to claims 1 and 7, see page 10 (first full paragraph) that "the accompanying evidence in Appendices A, B and, which clearly show that not only those of ordinary skill in the art did not interpret Schulzrinne to disclose what the Examiner has alleged, but, in fact, even 'experts' in the field understood that Schulzrinne had a major shortcoming that needed to be cured in a revised RFC 2833."

The Examiner maintains the 103(a) rejection over AAPA in view of Schulzrinne because the combination of the two references meets the feature of the pending claims

1 and 7. Albeit the Schulzrinne references may be viewed as having shortcoming, it still teaches audio event detection to cause a gateway to send a message, the ANS message, and the /ANS message.

### *Conclusion*

7.      **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN T. O'CONNOR whose telephone number is (571)270-1081. The examiner can normally be reached on 9:00AM-6:30PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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published applications may be obtained from either Private PAIR or Public PAIR.

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BTO/
Brian T. O'Connor
January 7, 2009
Patent Examiner


/Hassan Kizou/

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